



Gulf of Mexico Harmful Algal Bloom Bulletin

Region: AL/MS/FL

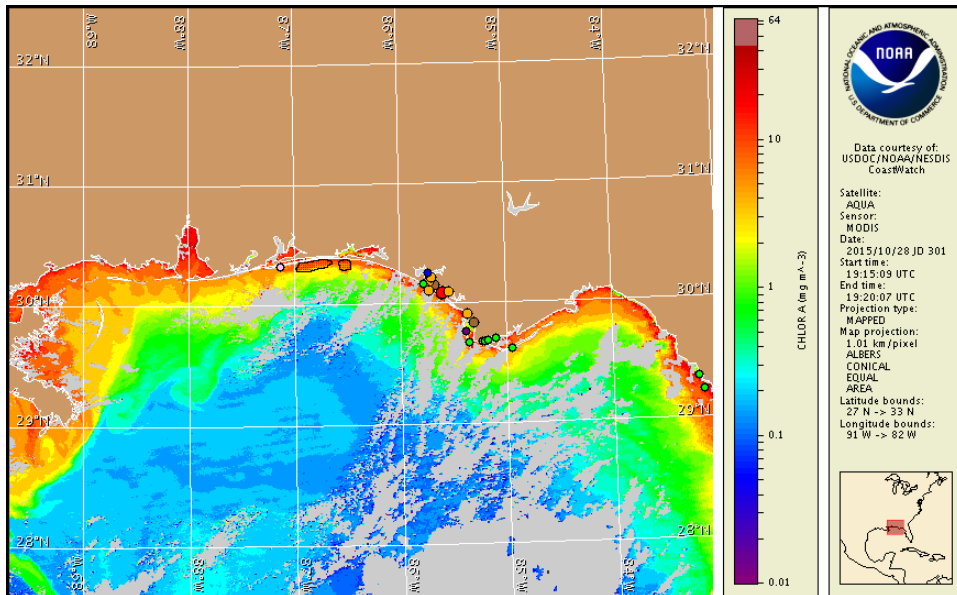
Thursday, 29 October 2015

NOAA National Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Monday, October 26, 2015



Satellite chlorophyll image with possible *K. brevis* HAB areas shown by red polygon(s), when applicable. Points represent cell concentration sampling data from October 19 to 28: red (high), orange (medium), yellow (low b), brown (low a), blue (very low b), purple (very low a), pink (present), and green (not present). For a list of sample providers and a key to the cell concentration categories, please see the HAB-OFS bulletin guide:

http://tidesandcurrents.noaa.gov/hab/habfs_bulletin_guide.pdf

Detailed sample information for Florida can be obtained through FWC Fish and Wildlife Research Institute at:

<http://myfwc.com/redtidestatus>

To see previous bulletins and forecasts for other Harmful Algal Bloom Bulletin regions, visit at: <http://tidesandcurrents.noaa.gov/hab/bulletins.html>

Conditions Report

Not present to high concentrations of *Karenia brevis* (commonly known as Florida red tide) are present along- and offshore portions of northwest Florida from Escambia to Taylor counties. *K. brevis* concentrations are patchy in nature and levels of respiratory irritation will vary locally based upon nearby bloom concentrations, ocean currents, and wind speed and direction. The highest level of potential respiratory irritation forecast for along-shore northwest Florida Thursday, October 29 to Monday, November 2 is listed below:

County Region: Forecast (Duration)

Escambia County: Very Low (Th, M), Moderate (F, Su), High (Sa)

Okaloosa County: High (Th, Sa-Su), Low (F, M)

Walton County: High (Th, Sa-Su), Moderate (F), Low (M)

Bay County: Moderate (Th, Sa-M), Low (F)

Bay County, bay regions: High (Th-M)

Gulf County: Moderate (Th, Su), Low (F), Very Low (Sa, M)

Gulf County, west bay regions-St. Joseph Bay area: Low (Th, Sa-M), Very Low (F)

All Other NWFL County Regions: None expected (Th-M)

SWFL County Regions: Visit <http://tidesandcurrents.noaa.gov/hab/#swfl>

Check http://tidesandcurrents.noaa.gov/hab/beach_conditions.html for recent, local observations. Health information, from the Florida Department of Health and other agencies, is available at http://tidesandcurrents.noaa.gov/hab/hab_health_info.html. Respiratory irritation has been reported from Escambia and Okaloosa counties. Fish kills have been reported in several areas along northwest Florida from Santa Rosa to Bay counties.

Analysis

Recent samples collected over the past week alongshore northwest Florida from Escambia to Taylor counties continue to identify background to 'high' *Karenia brevis* concentrations alongshore Escambia to Gulf counties, with the highest concentrations identified in East Bay in Bay County (FWRI; 10/19-25). Reports of slight to moderate respiratory irritation along Pensacola Beach in Escambia County and high respiratory irritation along Okaloosa County have been received over the past two days (MML 10/27-28). Large fish kills have been reported along northwest Florida in several areas in Santa Rosa, Okaloosa, Walton, and Bay counties. Detailed sample information and a summary of impacts can be obtained through FWC Fish and Wildlife Research Institute at: <http://myfwc.com/redtidestatus>.

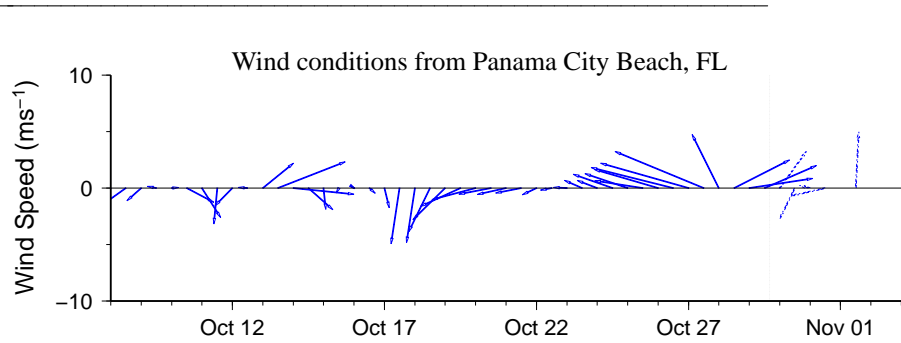
In recent ensemble imagery (MODIS Aqua, 10/28), a patches of elevated to high chlorophyll (2-17 $\mu\text{g/L}$) with the optical characteristics of *K. brevis* are visible along- and offshore northwest Florida from Santa Rosa to Gulf counties, extending up to 8 miles offshore Santa Rosa to Walton counties.

Winds forecasted alongshore northwest Florida Saturday through Monday may promote onshore transport of any offshore surface *K. brevis* concentrations.

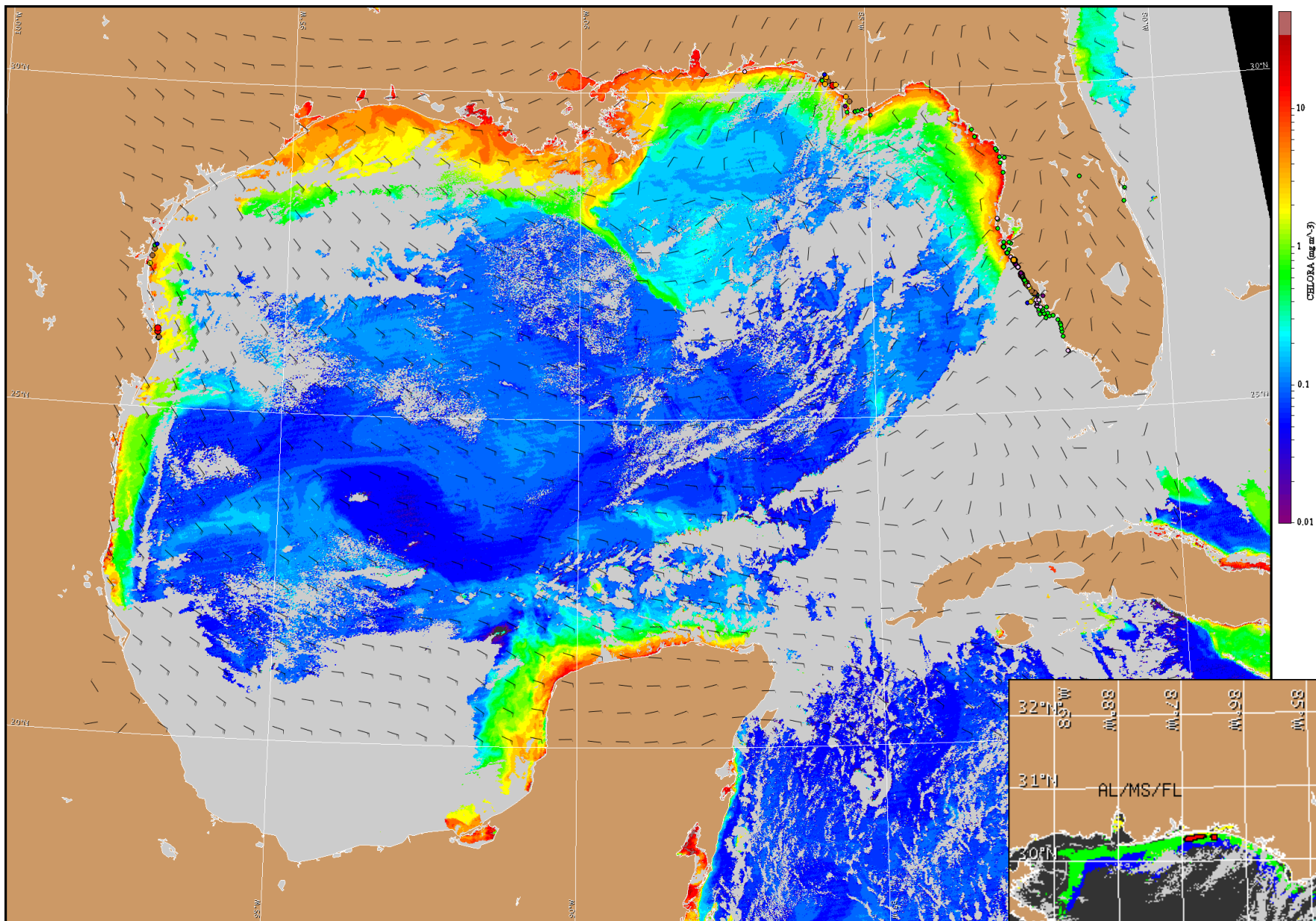
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Wind Analysis

Escambia to Taylor counties: Southwest to west winds (5-15kn, 3-8m/s) today. Northwest winds (5-10kn, 3-5m/s) tonight. North winds (5-10kn) Friday becoming east winds (5-10kn) in the afternoon through Friday night. Southeast winds (15-20kn, 8-10m/s) Saturday becoming south late Saturday night. South winds (5-15kn) Sunday through Monday.

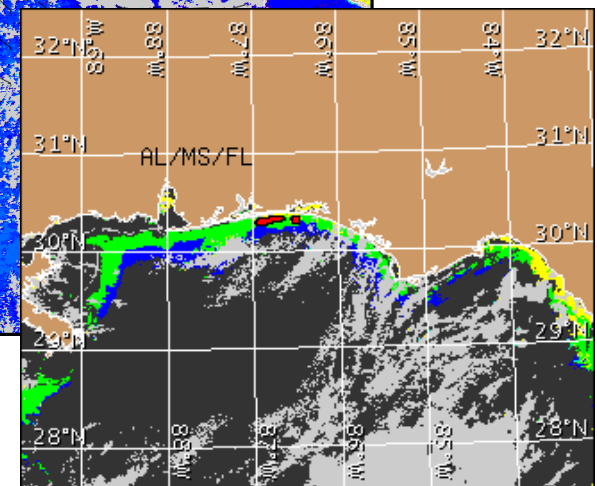


Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts. Wind observation and forecast data provided by NOAA's National Weather Service (NWS).



Satellite chlorophyll image and forecast winds for October 30, 2015 12Z with points representing cell concentration sampling data from October 19 to 28: red (high), orange (medium), yellow (low b), brown (low a), blue (very low b), purple (very low a), pink (present), and green (not present). For a list of sample providers and a key to the cell concentration categories, please see the HAB-OFS bulletin guide:

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Verified and suspected HAB areas shown in red. Other areas with *K. brevis* optical characteristics shown in yellow (see p. 1 analysis for interpretation).